## STATE OF NEW HAMPSHIRE

## INTER-DEPARTMENT COMMUNICATION

FROM Robert H. Estabrook Date January 14, 2008

Chief Aquatic Biologist

**SUBJECT** Status of Proposed & Previously Discussed **AT**(OFFICE)

Rule Changes Dept. of Environmental Services

Water Division/Watershed Management Bureau

**TO** Water Quality Standards Advisory Committee 1/22/2008 meeting

## **Situation:**

The WQSAC record (meeting minutes and documents) was reviewed to determine the status of proposed rule changes to **nutrients**, water transfers, turbidity and low flow (now called **criteria to determine discharge limits**, including time dependent modeling). Several iterations of these issues were discussed at a number of WQSAC meetings between January 24, 2001 and October 26, 2004. No final version was agreed to and the issues were put on hold until the antidegradation issue could be fully discussed. The purpose of this review is to determine the status of these specific issues before re-engaging the committee. The status of the proposed rule changes and concerns expressed about them are summarized below.

## **Discussion:**

- 1. The latest version of each of the four issues was presented at the October 26, 2004 meeting. At that time the committee was informed that "these are the versions of what we have already discussed and that we will go back to again as soon as we have worked through antidegradation. Antidegradation goes along with the draft rule language."
- 2. The reason for putting further discussions on hold was that many members were uncomfortable with some of the proposed changes and were reluctant to agree to changes until the antidegradation process was fully explained and workable. Often the DES response to a question was 'that is covered by anti-deg', but DES also agreed that anti-deg had never been employed thus the members' concerns.
- 3. The versions of the proposed changes from the October 26, 2004 meeting are in the working draft rules which is a documents in the January 22, 2008 meeting package.
- 4. Concerns expressed about the nutrient proposal (1703.14) included (a) disagreement with the related proposed policy that determined that non-point discharges including stormwater discharges and water transfers are not discharges of sewage or waste, and thus can be discharged to Class A waters, and (2) uncomfortable with deleting paragraph (e)

despite our inability to define "contribute to cultural eutrophication" because this is the only section that addresses non-point nutrient runoff and is the only mechanism to enforce against a non-point nutrient discharge that adversely impacts a lake.

- 5. The major concern with the proposed water transfer language was the definition of "aquatic life" and the methodology to be used to predict that a transfer will or will not have an adverse affect on aquatic life (can this be interpreted that every possible organism (bacteria, protozoa, etc) needs to be evaluated?). The other concern was the duration of the transfer: if the source water quality changed over time such that it now may adversely affect the receiving water, can the transfer be stopped.
- 6. Comments on turbidity included (a) a10 NTU change is significant if going from 1 to 11 whereas going from 100 to 110 it is not, and (b) background or upstream conditions are not the same as 'naturally occurring' conditions.
- 7. DES permit staff and EPA have expressed concerns over the use of 'time dependent' modeling to determine discharge limits. EPA's technical support document recommends two types of modeling, steady-state (which we currently use) and dynamic. Time dependent is not the same as dynamic and will result in more toxics loading to surface waters.
- 8. There are three other issues discussed by WQSAC that need to be finalized in order for the process to evaluate water transfers for compliance with water quality standards can be completed. They are; a) Methodology for assessing "as naturally occurs" for color, turbidity, nitrogen, phosphorus, and pH; b) determination of whether or not stormwater is sewage or waste; and c) completion of guidance development for implementation of the antidegradation rule with regards to i) Determination of High Quality Waters; ii) Determination of significant/insignificant degradation; iii) computation of assimilative capacity and 10% reserve capacity; iv) procedures and criteria for economic and social justification;